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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,459	08/24/2001	Masayuki Iguchi	FUJH 18.939	3658

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EXAMINER
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SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/939,459

Applicant(s)

IGUCHI ET AL.

Examiner

Simon Sing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5-7, 10, 11, 13, 14, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6, 7, 11, 14 and 17 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 13 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 08/24/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group II (claims 5-7, 10, 11, 13, 14, 16 and 17) in the reply filed on 04/08/2005 is acknowledged.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5, 10, 13 and 16 recite the limitation "said second channels" in lines 23, 21, 24 and 23 respectively. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6, 7, 11, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin US 6,690,938 in view of Takao et al. US 6,871,071.

3.1 Regarding claims 6, 11, 14 and 17, Chin discloses a system and method for reducing drop call in a wireless communications system during a soft handoff in figure 1. Chin teaches that during the soft handoff, there are a fundamental channel (first channel or voice channel with fixed bandwidth) and supplemental channels (second channel with variable bandwidth; column 6, lines 44-46, 66-67; column 7, lines 1-4), and the supplemental channel symmetry must be achieved in soft handoff (column 6, lines 57-65). Chin further teaches:

sending a resource a request (CRMRLM\_ResouceRelReq) for a supplemental channel from a base station controller (BSC) 14 to base station transceivers (BTS) (column 7, lines 47-49, 53-59; figure 3);

receiving a response from the BTS (column 7, lines 47-49, 59-67; column 8, lines 1-4); and

setting the channel bandwidth of the second channel as requested (column 8, lines 11-22).

Chin teaches setting the channel bandwidth of the second channel, but fails to teach that when available channel bandwidth is less than requested, then setting the second channel bandwidth to the available channel bandwidth.

However, Takao discloses a method and system for handover (handoff) in figure 1. Takao teaches that during handoff, minimum bandwidth is assigned in case the target base station (a mobile station is handed over from a source base station to a

target base station) does not have enough radio resources (channel bandwidth) (column 9, lines 62-67; column 10, lines 1-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Chin's reference, with the teaching of Takao, so that in case a target base station did not have enough channel bandwidth as requested, the channel bandwidth of the second channel would have been set to a minimum bandwidth for all base stations in a soft handoff to maintain channel symmetry. The motivation for this modification was to enhance the flexibility of handoff and to reduce drop off rate due to lower available channel bandwidth in a target base station.

3.2 Regarding claim 7, Chin teaches setting the second channel bandwidth as established with a source base station (column 7, lines 47-52; column 8, lines 11-22).

#### ***Allowable Subject Matter***

4. Claim 5, 10, 13 and 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

5. The following is a statement of reasons for the indication of allowable subject matter:

The current invention claims a method and system for setting a second channel bandwidth during a handoff, using the least available channel bandwidth from a plurality

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of base stations, when a mobile station is communicating with the plurality of base stations through a first channel.

Chin (US 6,699,938) teaches communications between a mobile station 26, base stations 18 and 20, and base station controller 14 in figure 1 (column 5, lines 15-27). Chin further teaches during a soft handoff, no additional supplemental channels are allocated (column 47-52). If only one channel is utilized during handoff (as claimed), then there is no motivation to add another channel in soft handoff.

### ***Conclusion***


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) US 5,896,573 (Yang et al.)
- b) US 6,590,879 (Huang et al)

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Simon Sing whose telephone number is (571) 272-7545. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached at (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 (571-273-8300 after 07/15/2005). Any inquiry of a general nature or relating to the status of

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this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.



S. Sing

06/20/2005



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